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Sybil P. Parker

Editor in Chief

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On the cover: Photomicrograph of crystals of vitamin B₁₂.
(Dennis Kunkel, University of Hawaii)

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cally, it is equivalent to a stable low-noise oscillator, an isolator, and a two- or three-cavity klystron amplifier. { 'mān-ə,frər }

monofilament [TEXT] A single, large, continuous filament (single-strand thread) of a natural or synthetic fiber. { 'mān-ə'fil-ə-mənt }

monofuel propulsion [AERO ENG] Propulsion system which obtains its power from a single fuel; in rocket units, the fuel furnishes both oxygen supply and the hydrocarbon for combustion. { 'mān-ə,fyūl prə'pəl-shən }

monofunctional compound [ORG CHEM] An organic compound whose chemical structure possesses a single highly reactive site. { 'mān-ə,fəŋk-shən-əl 'kām,pəund }

monogamous bivalent [IMMUNOL] Antigen-antibody complex in which each bivalent antibody combines with two determinant groups on a single antigen molecule. { mə'nāg-ə-məs bī'vā-lənt }

monogamy [ANTHRO] Marriage to only one person at a time. { mə'nāg-ə-mē }

monogastric [VERT ZOO] Having only one digestive cavity. { 'mān-ə'gast-rik }

Monogenea [INV ZOO] A diverse subclass of the Trematoda which are principally ectoparasites of fishes; individuals have enlarged anterior and posterior holdfasts with paired suckers anteriorly and opisthaptors posteriorly. { 'mān-ə'jē-nē-ə }

monogenic analytic function [MATH] An analytic function whose domain of definition has been extended directly or indirectly by analytic continuation as far as theoretically possible. { 'mān-ə,jen-ik ,an-ə'lid-ik 'fəŋk-shən }

Monogenoidea [INV ZOO] A class of the Trematoda in some systems of classification; equivalent to the Monogenea of other systems. { 'mān-ə'jē-nōid-ē-ə }

monogeosyncline [GEOL] A primary geosyncline that is long, narrow, and deeply subsided; composed of the sediments of shallow water and situated along the inner margin of the borderlands. { 'mān-ə'jē-ō'sin,kli:n }

monoglyceride [ORG CHEM] Any of the fatty-acid glycerol esters where only one acid group is attached to the glycerol group, for example, $\text{RCOOCH}_2\text{CHOHCH}_2\text{OH}$; examples are glycerol monostearate and monolaurate; used as emulsifiers in cosmetics and lubricants. { 'mān-ə'glis-ə,rīd }

Monogonota [INV ZOO] An order of the class Rotifera, characterized by the presence of a single gonad in both males and females. { 'mān-ə'gō-nād-ə }

monogony [BIOL] Asexual reproduction. { mə'nāg-ə-mē }

monogynous [BOT] Having only one pistil. [VERT ZOO] 1. Having only one female in a colony. 2. Consorting with only one female. { mə'nāj-ə-nəs }

monohull boat [NAV ARCH] A boat with a single hull. { 'mān-ə,həl 'bōt }

monohybrid [GEN] A hybrid individual heterozygous for one gene or a single character. { 'mān-ə'hī-brəd }

monoid [MATH] A semigroup which has an identity element. { 'mān-oid }

monoidism [PSYCH] A mental condition marked by the domination of a single idea; persistent and thorough preoccupation with one idea, but seldom an idea that is complete. { 'mān-ə'id-ē-iz-əm }

monokine [BIOCHEM] A cytokine released from macrophages. { 'mān-ə,kīn }

monolayer See monomolecular film. { 'mān-ə,lā-ər }

monolayer capacity [CHEM] 1. In chemisorption, the amount of adsorbate required to occupy all adsorption sites on the solid surface. 2. In physisorption, the amount of material required to cover the solid surface with a complete monolayer of the adsorbate in a close-packed array. { 'mān-ə,lā-ər kə,pas-əd-ē }

monolith [MATER] A large concrete block. { 'mān-ə,lith }

monolithic [CIV ENG] Pertaining to concrete construction which is cast in one jointless piece. [SCI TECH] Constructed from a single crystal or other single piece of material. { 'mān-ə'lith-ik }

monolithic ceramic capacitor [ELECTR] A capacitor that consists of thin dielectric layers interleaved with staggered metal-film electrodes; after leads are connected to alternate projecting ends of the electrodes, the assembly is compressed and sintered to form a solid monolithic block. { 'mān-ə'lith-ik sə'ram-ik kə,pas-əd-ər }

monolithic filter [COMMUN] A device used to separate telephone communications sent simultaneously over the transmission line, consisting of a series of electrodes vacuum-deposited

on a crystal plate so that the plated sections are resonant with ultrasonic sound waves, and the effect of the device is similar to that of an electric filter. { 'mān-ə'lith-ik 'fil-tər }

monolithic integrated circuit [ELECTR] An integrated circuit having elements formed in place on or within a semiconductor substrate, with at least one element being formed within the substrate. { 'mān-ə'lith-ik 'int-ə,grād-əd sə'rkat }

monomer [CHEM] A simple molecule which is capable of combining with a number of like or unlike molecules to form a polymer; it is a repeating structure unit within a polymer. Also known as repeating unit. { 'mān-ə-mər }

monomeric unit See repeating unit. { 'mān-ə,mer-ik 'yū-nət }

monomial [MATH] A polynomial of degree one. { mə'nō-mē-əl }

monomial factor [MATH] A single factor that can be divided out of every term in a given expression. { mə'nō-mē-əl ,fak-tər }

monomineralic [PETR] Of a rock, composed entirely or principally of a single mineral. { 'mān-ə,min-ə'ral-ik }

Monommidae [INV ZOO] A family of coleopteran insects in the superfamily Tenebrionoidea. { mə'nam-ə,dē }

monomolecular film [PHYS CHEM] A film one molecule thick. Also known as monolayer. { 'mān-ə'mōlek-yə-lər 'film }

monomorphic [BIOL] Having or exhibiting only a single form. { 'mān-ə,mōr-fik }

mononuclear [CYTOL] Having only one nucleus. { 'mān-ə'nū-klē-ər }

mononucleosis [MED] Any of various conditions marked by an abnormal increase in monocytes in the peripheral blood. { 'mān-ə,nū-klē-ō-səs }

monophagous [ZOO] Subsisting on a single kind of food. Also known as monotrophic. { mə'nāf-ə-gəs }

Monophisthocotylea [INV ZOO] An order of the Monogenea in which the posthaptor is without discrete multiple suckers or clamps. { 'mān-ə,fis'thə,kād-əl'ē-ə }

Monophlebinæ [INV ZOO] A subfamily of the homopteran superfamily Coccoidea distinguished by a dorsal anus. { 'mān-ə'fleb-ə,nē }

monophonic sound [ENG ACOUS] Sound produced by a system in which one or more microphones feed a single transducing channel which is coupled to one or more loudspeakers. { 'mān-ə'fān-ik ,saund }

monophyletic [EVOL] Pertaining to any form evolved from a single interbreeding population. { 'mān-ə'fə-led-ik }

monophyodont [VERT ZOO] Having only one set of teeth throughout life. { 'mān-ə'fī-ə,dənt }

monopinch [ELECTR] Antijam application of the monopulse technique where the error signal is used to provide discrimination against jamming signals. { 'mān-ə,pinch }

Monopisthocotylea [INV ZOO] An order of trematode worms in the subclass Pectobothridia. { 'mān-ə,fis'thə,kād-əl'ē-ə }

Monoplacophora [INV ZOO] A group of shell-bearing mollusks represented by few living forms; considered to be a sixth class of mollusks. { 'mān-ə'plə'kəf-ə-rə }

monoplegia [MED] Paralysis involving a single limb, muscle, or group of muscles. { 'mān-ə'plē-jē-ə }

monoploid [GEN] 1. Having only one set of chromosomes. 2. Having the haploid number of chromosomes. { 'mān-ə,plōid }

monopodial [BOT] Stem branching in which there are lateral shoots on a primary axis. { 'mān-ə'pōd-ē-əl }

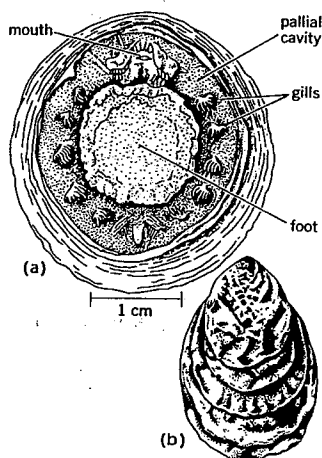
monopodium [BOT] A primary axis that continues to grow while giving off successive lateral branches. { 'mān-ə'pōd-ē-əm }

monopole See magnetic monopole. { 'mān-ə,pōl }

monopole antenna [ELECTROMAG] An antenna, usually in the form of a vertical tube or helical whip, on which the current distribution forms a standing wave, and which acts as one part of a dipole whose other part is formed by its electrical image in the ground or in an effective ground plane. Also known as spike antenna. { 'mān-ə,pōl an'ten-ə }

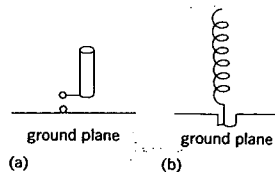
Monoposthoidea [INV ZOO] A superfamily of chiefly marine nematodes in the order Desmodorida, represented by the single family Monoposthiidae; distinguished by an annulate cuticle with spikelike ornamentation and a stoma that may or may not possess a well-developed tooth opposed by small subventral teeth. { 'mān-ə,pās'thē-ōid-ē-ə }

MONOPLACOPHORA



Living and fossil Monoplacophora. (a) *Neopilina galathea* Lemche. (b) *Tryblidium reticulatum* Lindström. (Adapted from R. C. Moore, ed., *Treatise on Invertebrate Paleontology*, pt. 1, 1957)

MONOPOLE ANTENNA



Types of monopole antenna with horizontal and vertical patterns. (a) Vertical tube. (b) Helical.